

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	634	nasal AND antioxidant SAME ("citric acid" OR "sodium citrate")	USPAT	OR	ON	2010/05/15 19:10
L3	0	nasal AND antioxidant SAME ("citric acid" OR "sodium citrate") WITH mg/mL	USPAT	OR	ON	2010/05/15 19:11
L4	0	nasal AND antioxidant SAME ("citric acid" OR "sodium citrate") WITH mg/mL	USPAT	OR	ON	2010/05/15 19:12
L5	0	nasal AND antioxidant SAME ("citric acid" OR "sodium citrate") SAME mg/mL	USPAT	OR	ON	2010/05/15 19:12
L6	4230	("citric acid" OR "sodium citrate") SAME mg/mL	USPAT	OR	ON	2010/05/15 19:12
L7	629	("citric acid" OR "sodium citrate") SAME mg/mL AND nasal	USPAT	OR	ON	2010/05/15 19:12
L8	174	("citric acid" OR "sodium citrate") SAME mg/mL AND nasal ADJ1 spray	USPAT	OR	ON	2010/05/15 19:12
L9	12	("citric acid" OR "sodium citrate") SAME mg/mL AND nasal ADJ1 spray AND morphine	USPAT	OR	ON	2010/05/15 19:13
L10	174	("citric acid" OR "sodium citrate") SAME mg/mL AND nasal ADJ1 spray	USPAT	OR	ON	2010/05/15 19:16
L11	34	"4690952"	USPAT	OR	ON	2010/05/15 19:24
L12	41	("citric acid" OR "sodium citrate")WITH mg/mL AND nasal ADJ1 spray	USPAT	OR	ON	2010/05/15 19:30
L13	1790	"sodium benzoate" AND nasal	USPAT	OR	ON	2010/05/15 19:34
L14	428	"sodium benzoate" AND nasal adj1 spray	USPAT	OR	ON	2010/05/15 19:36
L15	21	"sodium benzoate" AND nasal adj1 spray and morphine	USPAT	OR	ON	2010/05/15 19:37
S1	4	transmucosal\$ AND morphine AND chitosan adj polymer AND (water aqueous)	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/14 13:57
S2	1480	transmucosal\$ AND morphine	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 09:54

## EAST Search History (Prior Art)

S3	1462	transmucosal\$ AND morphine AND (aqueous water)	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/14 13:58
S4	326	transmucosal\$ AND morphine AND (aqueous water) AND "424"	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/14 14:42
S5	779	chitosan AND morphine	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/14 14:42
S6	240	chitosan AND morphine AND "424"	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/14 14:43
S7	181	chitosan AND morphine AND "424"	USPAT	OR	ON	2006/12/14 15:04
S8	9	chitosan AND morphine AND microbial AND antioxidant AND water AND (nasal buccal rectal vaginal ocular)	USPAT	OR	ON	2007/02/23 07:50
S9	29	chitosan AND morphine AND \$microbial AND antioxidant	USPAT	OR	ON	2007/02/23 14:37
S10	15	morphine adj3 monohydrate	USPAT	OR	ON	2007/11/07 09:53
S11	125800	(methanesulphonic adj3 acid citric adj3 acid sodium adj3 citrate ascorbic adj3 acid sodium adj3 ascorbate)	USPAT	OR	ON	2007/02/23 13:49
S12	1594	(methanesulphonic adj3 acid citric adj3 acid sodium adj3 citrate ascorbic adj3 acid sodium adj3 ascorbate) AND transmucosal	USPAT	OR	ON	2007/02/23 13:49
S13	270	(methanesulphonic adj3 acid citric adj3 acid sodium adj3 citrate ascorbic adj3 acid sodium adj3 ascorbate) AND transmucosal AND morphine	USPAT	OR	ON	2007/02/23 13:49
S14	14	(methanesulphonic adj3 acid citric adj3 acid sodium adj3 citrate ascorbic adj3 acid sodium adj3 ascorbate) AND transmucosal AND morphine AND chitosan	USPAT	OR	ON	2007/02/23 13:52
S15	1	(methanesulphonic adj3 acid) AND transmucosal AND morphine AND chitosan	USPAT	OR	ON	2007/02/23 14:11

## EAST Search History (Prior Art)

S16	23781	(methanesulphonic adj3 acid)	USPAT	OR	ON	2007/02/23 13:53
S17	403	(methanesulphonic adj3 acid) AND transmucosal	USPAT	OR	ON	2007/02/23 13:53
S18	4	(benzalkonium adj1 chloride disodium adj3 EDTA sodium adj3 benzoate) AND transmucosal AND morphine AND chitosan	USPAT	OR	ON	2007/02/23 14:12
S19	2	"6387917" AND buffer	USPAT	OR	ON	2007/02/23 14:37
S20	154	transmucosal\$ AND morphine AND chitosan	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/11/07 09:54
S21	34	transmucosal\$ AND morphine AND chitosan	USPAT	OR	ON	2007/11/07 09:54
S22	200	chitosan AND morphine AND (nasal buccal rectal vaginal ocular)	USPAT	OR	ON	2009/11/30 16:35
S23	92	chitosan AND morphine AND (nasal buccal rectal vaginal ocular) AND linear	USPAT	OR	ON	2009/11/30 16:35
S24	0	chitosan AND morphine AND (nasal buccal rectal vaginal ocular) AND linear adj1 absorption	USPAT	OR	ON	2009/11/30 16:36
S25	0	chitosan AND morphine AND (nasal buccal rectal vaginal ocular) AND linear adj1 uptake	USPAT	OR	ON	2009/11/30 16:36
S26	92	chitosan AND morphine AND (nasal buccal rectal vaginal ocular) AND linear	USPAT	OR	ON	2009/11/30 16:36
S27	2	chitosan AND morphine AND (nasal buccal rectal vaginal ocular) AND linear adj1 uptake	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/30 16:37
S28	991	chitosan AND morphine AND (nasal buccal rectal vaginal ocular transmucosal)	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/30 16:38
S29	536	chitosan AND morphine AND (nasal buccal rectal vaginal ocular transmucosal) AND linear	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/30 16:39

## EAST Search History (Prior Art)

S30	4	chitosan AND morphine AND (nasal buccal rectal vaginal ocular transmucosal) AND linear adj1 absorption	US-PGPUB; USPAT; USOOR; FPRI; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/30 16:39
S31	991	chitosan AND morphine AND (nasal buccal rectal vaginal ocular transmucosal)	US-PGPUB; USPAT; USOOR; FPRI; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/11/30 16:40
S32	202	chitosan AND morphine AND (nasal buccal rectal vaginal ocular transmucosal)	USPAT	OR	ON	2009/11/30 16:40
S33	4448	transmucosal\$ AND antioxidant SAME ("citric acid" "ascorbic acid" "sodium citrate" "sodium ascorbate")	US-PGPUB; USPAT; USOOR; FPRI; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:17
S34	281	transmucosal\$ AND antioxidant SAME ("citric acid" "ascorbic acid" "sodium citrate" "sodium ascorbate") SAME amount	US-PGPUB; USPAT; USOOR; FPRI; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:18
S35	51	transmucosal\$ AND antioxidant SAME ("citric acid" "ascorbic acid" "sodium citrate" "sodium ascorbate") SAME amount	USPAT	OR	ON	2009/12/04 11:18
S36	9	transmucosal\$ AND antioxidant SAME (("citric acid" OR "sodium citrate") AND ("ascorbic acid" OR "sodium ascorbate")) SAME amount	USPAT	OR	ON	2009/12/04 11:20
S37	11	transmucosal\$ AND antioxidant SAME ("citric acid" OR "sodium citrate") SAME amount	USPAT	OR	ON	2009/12/04 11:23
S38	81	transmucosal\$ AND antioxidant SAME ("citric acid" OR "sodium citrate") SAME amount	US-PGPUB; USPAT; USOOR; FPRI; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:24

## EAST Search History (Prior Art)

S39	71	transmucosal\$ AND antioxidant SAME (("citric acid" OR "sodium citrate") AND ("ascorbic acid" OR "sodium ascorbate")) SAME amount	US-PPGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:25
S40	234	transmucosal\$ AND antioxidant SAME (("citric acid" OR "sodium citrate") AND ("ascorbic acid" OR "sodium ascorbate"))	US-PPGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:28
S41	322	transmucosal\$ AND antioxidant SAME ("citric acid" OR "sodium citrate")	US-PPGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 11:32
S42	45	transmucosal\$ AND antioxidant SAME ("citric acid" OR "sodium citrate")	USPAT	OR	ON	2009/12/04 11:33
S43	45	transmucosal\$ AND antioxidant SAME ("citric acid" OR "sodium citrate")	USPAT	OR	ON	2009/12/04 12:29
S44	2041	transmucosal\$ AND ("citric acid" OR "sodium citrate")	USPAT	OR	ON	2009/12/04 12:29
S45	2600	nasal AND antioxidant SAME ascorbic adj1 acid	USPAT	OR	ON	2009/12/04 12:42
S46	8309	nasal AND antioxidant SAME (( "ascorbic acid" OR "sodium ascorbate") AND ("citric acid sodium citrate")) OR "vitamin C"	USPAT	OR	ON	2009/12/04 12:44
S47	8332	naSAME antioxidant SAME (( "ascorbic acid" OR "sodium ascorbate") AND ("citric acid sodium citrate")) OR "vitamin C"	USPAT	OR	ON	2009/12/04 12:45
S48	8308	nasal SAME antioxidant SAME (( "ascorbic acid" OR "sodium ascorbate") AND ("citric acid sodium citrate")) OR "vitamin C"	USPAT	OR	ON	2009/12/04 12:45
S49	6	nasal SAME antioxidant SAME "vitamin C"	USPAT	OR	ON	2009/12/04 12:45
S50	21	nasal SAME antioxidant SAME "vitamin C"	US-PPGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 12:53

## EAST Search History (Prior Art)

S51	920	nasal AND antioxidant SAME "vitamin C"	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/04 12:54
S52	223	nasal AND antioxidant SAME "vitamin C"	USPAT	OR	ON	2009/12/04 12:54
S53	3606	nasal SAME (spray inhalant aerosol) AND antioxidant	USPAT	OR	ON	2009/12/04 13:03
S54	1551	nasal SAME (spray inhalant aerosol) AND antioxidant SAME (citric ascorbic)	USPAT	OR	ON	2009/12/04 13:03
S55	1540	nasal SAME (spray inhalant aerosol) AND antioxidant SAME (citric ascorbic) AND amount	USPAT	OR	ON	2009/12/04 13:03
S56	331	nasal SAME (spray inhalant aerosol) AND antioxidant SAME (citric ascorbic) SAME amount	USPAT	OR	ON	2009/12/04 13:03
S57	34194	nasal SAME (spray inhalant aerosol) (citric ascorbic) SAME amount	USPAT	OR	ON	2009/12/04 13:06
S58	910	nasal SAME (spray inhalant aerosol) AND (citric ascorbic) SAME amount	USPAT	OR	ON	2009/12/04 13:06
S59	2683537	nasal SAME (spray inhalant aerosol) AND vitamin C	USPAT	OR	ON	2009/12/04 13:40
S60	303	nasal SAME (spray inhalant aerosol) AND "vitamin C"	USPAT	OR	ON	2009/12/04 13:49
S61	37484	nasal SAME (spray inhalant aerosol) AND "citric acid" "sodium citrate"	USPAT	OR	ON	2009/12/04 15:15
S62	5396	nasal SAME (spray inhalant aerosol) AND ("citric acid" "sodium citrate")	USPAT	OR	ON	2009/12/04 15:15
S63	79	nasal SAME (spray inhalant aerosol) SAME ("citric acid" "sodium citrate")	USPAT	OR	ON	2009/12/04 15:15
S64	113	nasal SAME (spray inhalant aerosol) SAME ("citric acid" "sodium citrate")	US-PGPUB	OR	ON	2009/12/04 15:22
S65	6	"6387917"	US-PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/04/06 12:32
S66	9	"5508282"	USPAT	OR	ON	2010/04/06 12:34
S67	2568	antioxidants SAME ("citric acid" "sodium citrate") AND ("ascorbic acid" "sodium ascorbate")	USPAT	OR	ON	2010/04/06 12:45
S68	577	antioxidants SAME ("citric acid" "sodium citrate") AND ("ascorbic acid" "sodium ascorbate") and nasal	USPAT	OR	ON	2010/04/06 12:45

### EAST Search History (Prior Art)

S69	41	antioxidants SAME ("citric acid" "sodium citrate") AND ("ascorbic acid" "sodium ascorbate") and nasal adj1 spray	USPAT	OR	ON	2010/04/06 13:14
S70	9	"5508282"	USPAT	OR	ON	2010/04/06 13:15